

receiving the operational configuration information at the base station; and  
configuring the base station based on the operational configuration information.

29. The method in claim 28, wherein the operational configuration information is  
received at the base station in the format of the abstract resource information model.

30. The method in claim 28, wherein the configuration information is received at  
the base station using a commonly understood format.

31. A method according to claim 26, wherein the base station is a new base station  
being installed into the communication network.

32. The method in claim 31, wherein the base station is an existing base station to  
be reconfigured.

33. A method according to claim 26, wherein the base station automatically  
implements the abstract resource information model using hardware and software  
infrastructures of the base station.

34. A method according to claim 26, wherein the base station implements the  
abstract resource information model using combinational relationships between various  
logical hardware and software infrastructure objects of the base station and attribute  
information for the various logical hardware and software infrastructure objects of the base  
station.

35. A method according to claim 34, wherein the logical hardware and software  
infrastructure objects in the abstract resource information model include one or more of  
frequency spectrum information, maximum power information, and channel type  
information, and wherein the combinational relationships between the objects describe  
relationships between one or more of radio connection units, carrier units and antenna units.

36. A method relating to configuring or re-configuring a base station in a cellular  
radio network, comprising:

sending to a network controller capabilities information corresponding to operational capabilities of the base station, the capabilities information being in a format of an abstract resource information model, and

receiving configuration information from the network controller identifying operational parameters for use by the base station in handling cellular radio traffic.

37. A method according to claim 36, wherein the base station is a new base station being installed into the cellular radio network.

38. The method in claim 36, wherein the base station is an existing base station to be reconfigured.

39. A method according to claim 36, wherein the base station automatically implements the abstract resource information model based on hardware and software infrastructures of the base station.

40. A method according to claim 36, wherein the abstract resource information model is implemented using combinational relationships between various hardware and software infrastructure objects of the base station and attribute information for various hardware and software infrastructure objects of the base station.

41. A method according to claim 40, wherein the hardware and software infrastructure objects in the abstract resource information model include one or more of frequency spectrum information, maximum power information, and channel type information, and wherein the combinational relationships between the objects describe relationships between one or more of radio connection units, carrier units and antenna units.

42. A method according to claim 36, wherein the configuration information is in the format of the abstract resource information model.

43. A method according to claim 36, wherein the configuration information is in a commonly understood format.

44. A system for use in a mobile communications network, comprising:  
a control node associated with the mobile communications network, and  
a base station configured to communicate its capabilities to the control node using a  
format of an abstract resource information model.

45. The system in claim 44, wherein the control node is configured to receive the  
base station capabilities and communicate operational configuration information to the base  
station so that base station is configured using the operational configuration information.

46. The system in claim 44, wherein the operational configuration information is  
in the format of the abstract resource information model.

47. The system in claim 44, wherein the operational configuration information is  
in a commonly understood format.

48. The system according to claim 44, wherein the base station is a new base  
station to be installed into the communication network.

49. The system according to claim 44, wherein the base station is an existing base  
station to be reconfigured.

50. The system in claim 44, wherein the base station is configured to automatically  
implement the abstract resource information model based on hardware and software  
infrastructures of the base station.

51. The system in claim 50, wherein the base station is configured to implement  
the abstract resource information model using combinational relationships between various  
hardware and software infrastructure objects of the base station and attribute information  
for various hardware and software infrastructure objects of the base station.

52. The system in claim 50, wherein the hardware and software infrastructure  
objects in the abstract resource information model include one or more of frequency  
spectrum information, maximum power information, and channel type information, and

wherein the combinational relationships between the objects describe relationships between one or more of radio connection units, carrier units and antenna units.

53. A base station configured for addition into an existing cellular radio system coordinated by a control node in the cellular radio system, comprising:  
radio transmitting and receiving circuitry, and  
a controller, coupled to the radio transmitting and receiving circuitry, configured to send to the control node capabilities information corresponding to operational capabilities of the base station, the capabilities information being in a format of an abstract resource information model, and to use configuration information received from the control node in transmitting and receiving cellular radio traffic.

54. The base station in claim 53, wherein the controller includes:  
means for automatically implementing the abstract resource information model based on hardware and software infrastructures of the base station.

55. The base station in claim 54, wherein the means for automatically implementing uses combinational relationships between various hardware and software infrastructure objects of the base station and attribute information for various hardware and software infrastructure objects of the base station.

56. The base station in claim 55, wherein the hardware and software infrastructure objects in the abstract resource information model include one or more of frequency spectrum information, maximum power information, and channel type information pertaining to the radio transmitting and receiving circuitry, and wherein the combinational relationships between the objects describe relationships between one or more of radio connection units, carrier units and antenna units included in the radio transmitting and receiving circuitry.

57. The base station in claim 53, wherein the configuration information is in received the format of the abstract resource information model.